

Substitute Form PTO-1449
(Modified)U.S. Department of Commerce
Patent and Trademark OfficeAttorney's Docket No.
06618-896001Application No.
09/842,204
**Information Disclosure Statement
by Applicant**
(Use several sheets if necessary)

(37 CFR §1.98(b))

Applicant
Nathan S. Lewis et al.Filing Date
April 24, 2001Group Art Unit
1743**U.S. Patent Documents**

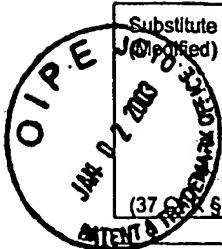
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	6,350,369	Feb 26, 2002	Lewis et al.			
	AB	6,315,956	Nov 13, 2001	Foulger			
	AC	6,305,214	Oct 23, 2001	Schattke et al.			
	AD	6,290,911	Sept 18, 2001	Lewis et al.			
	AE	6,234,004	May 22, 2001	Revsbech et al.			
	AF	6,170,318	Jan 9, 2001	Lewis			
	AG	6,134,950	Oct 24, 2000	Forster et al.			
	AH	6,134,461	Oct 17, 2000	Say et al.			
	AI	6,103,033	Aug 15, 2000	Say et al.			
	AJ	6,093,308	Jul 25, 2000	Lewis et al.			
	AK	6,085,576	Jul 11, 2000	Sunshine et al.			
	AL	6,023,163	Feb 8, 2000	Flaum et al.			
	AM	6,013,229	Jan 11, 2000	Lewis et al.			
	AN	6,010,616	Jan 4, 2000	Lewis et al.			
	AO	5,980,723	Nov 9, 1999	Runge-Marchese et al.			
	AP	5,959,191	Sept 28, 1999	Lewis et al.			
	AQ	5,958,787	Sept 28, 1999	Schonfeld et al.			
	AR	5,951,846	Sept 14, 1999	Lewis et al.			
	AS	5,913,235	June 15, 1999	Silenius et al.			
	AT	5,911,872	June 15, 1999	Lewis et al.			
	AU	5,891,398	April 6, 1999	Lewis et al.			
	AV	5,879,827	March 9, 1999	Debe et al.			
	AW	5,876,577	March 2, 1999	McAleer et al.			
	AX	5,846,744	Dec 8, 1998	Athey et al.			
	AY	5,807,701	Sept 15, 1998	Payne et al.			
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	AAA	5,804,100	Sept 8, 1998	Angelopoulos et al.			

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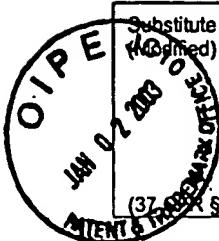
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Information Disclosure Statement by Applicant (Use several sheets if necessary)		Applicant Nathan S. Lewis et al.	
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U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	ABB	5,801,297	Sept 1, 1998	Mifsud et al.			
	ACC	5,788,833	Aug 4, 1998	Lewis et al.			
	ADD	5,766,934	June 16, 1998	Guiseppi-Elie			
	AEE	5,756,879	May 26, 1998	Yamagishi et al.			JAN 03 2003
	AFF	5,705,265	Jan 6, 1998	Clough et al.			TC 1700
	AGG	5,698,089	Dec 16, 1997	Lewis et al.			
	AHH	5,674,752	Oct 7, 1997	Buckley et al.			
	AII	5,653,939	Aug 5, 1997	Hollis et al.			
	AJJ	5,627,329	May 6, 1997	Krishnan et al.			
	AKK	5,591,898	Jan 7, 1997	Mayer			
	ALL	5,571,401	Nov 5, 1996	Lewis et al.			
	AMM	5,536,473	Jul 16, 1996	Monkman et al.			
	ANN	5,519,147	May 21, 1996	Swager et al.			
	AOO	5,505,093	April 9, 1996	Giedd et al.			
	APP	5,498,372	Mar 12, 1996	Hedges			
	AQQ	5,466,348	Nov 14, 1995	Holm-Kennedy			
	ARR	5,425,869	June 20, 1995	Noding et al.			
	ASS	5,417,100	May 23, 1995	Miller et al.			
	ATT	5,415,893	May 16, 1995	Wiersma et al.			
	AUU	5,407,699	April 18, 1995	Myers			
	AVV	5,352,574	Oct 4, 1994	Guiseppi-Elie			
	AWW	5,335,555	Aug 9, 1994	Guizot et al.			
	AXX	5,302,274	April 12, 1994	Tomantachger et al.			
	AYY	5,286,414	Feb 15, 1994	Kampf et al.			
	AZZ	5,278,501	Jan 11, 1994	Guilfoyle			
	AAAA	5,253,329	Oct 12, 1993	Villareal et al.			
	ABBB	5,250,264	Oct 5, 1993	Walt et al.			

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Substitute Form PTO-1449 (Revised)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 06618-896001	Application No. 09/842,204
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Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
TJW	ACCC	5,246,846	Sept 21, 1993	Pittner et al.			
TJW	ADDD	5,225,110	July 6, 1993	Kathirgamanathan			
TJW	AEEE	5,217,692	June 8, 1993	Rump et al.			
TJW	AFFF	5,215,820	June 1, 1993	Hosokawa et al.			
TJW	AGGG	5,212,447	May 18, 1993	Paltiel			
TJW	AHHH	5,159,829	Nov 3, 1992	Mayer et al.			RECEIVED JAN 9 2003
TJW	AIII	4,927,502	May 22, 1990	Reading et al.			TC 1700
TJW	AJJJ	4,914,608	April 3, 1990	LeBihan et al.			
TJW	AKKK	4,911,801	Mar 27, 1990	Pons et al.			
TJW	ALLL	4,772,559	Sept 20, 1988	Preti et al.			
TJW	AMMM	4,719,423	Jan 12, 1988	Vinegar et al.			
TJW	ANNN	4,674,320	June 23, 1997	Hirschfeld			
TJW	AOOO	4,644,154	Feb 17, 1987	Brogardh et al.			
TJW	APPP	4,424,487	Jan 3, 1984	Lauffer et al.			
TJW	AQQQ	4,349,664	Sept 14, 1982	Matsumura et al.			
TJW	ARRR	4,225,410	Sept 30, 1980	Pace et al.			
TJW	ASSS	4,172,721	Oct 30, 1979	Byrne			
TJW	ATTT	3,677,071	July 18, 1972	Martin et al.			
TJW	AUUU	6,017,440	Jan 25, 2000	Lewis et al.			
TJW	AVVV	5,469,369	Nov 21, 1995	Rose-Pehrsson et al.			
TJW	AWWW	6,028,608	Feb 22, 2000	Jenkins			

Foreign Patent Documents or Published Foreign Patent Applications

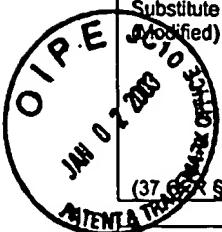
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TJW	AXXX	0 878 711A1	Nov 18, 1998	EP				
TJW	AYYY	0 717 418A2	June 19, 1996	EP				
TJW	AZZZ	11-94784	April 9, 1999	JP			Abstract only	

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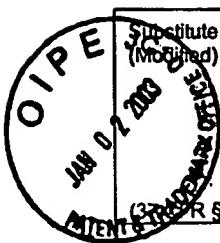


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Foreign Patent Documents or Published Foreign Patent Applications							
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation
							Yes No
TJH	AAAAA	63-308807	Dec 16, 1988	JP			Abstract only
JWY	BBBBB	63-120733	May 25, 198	JP			Abstract only
JWY	CCCCC	62-257968	Nov 10, 1987	JP			Abstract only
JWY	DDDDD	WO 00/33062	June 8, 2000	WIPO			RECEIVED
JWY	EEEEEE	WO 00/26638	May 11, 2000	WIPO			JAN 03 2003
JWY	FFFFF	WO 00/00808	Jan 6, 2000	WIPO			TC 1700
JWY	AGGGG	WO 99/67627	Dec 29, 1999	WIPO			
JWY	AHHHH	WO 99/66304	Dec 23, 1999	WIPO			
JWY	AIIII	WO 99/61902	Dec 2, 1999	WIPO			
JWY	AJJJJ	WO 99/53300	Oct 21, 1999	WIPO			
JWY	AKKKK	WO 99/53287	Oct 21, 1999	WIPO			
JWY	ALLLL	WO 99/47905	Sept 23, 1999	WIPO			
JWY	AMMMM	WO 99/40423	Aug 12, 1999	WIPO			
JWY	ANNNN	WO 99/08105	Feb 18, 1999	WIPO			
JWY	AOOOO	WO 99/00663	Jan 7, 1999	WIPO			
JWY	APPPP	WO 96/07901	Mar 14, 1996	WIPO			
JWY	AQQQQ	WO 95/08113	Mar 23, 1995	WIPO			Abstract only
JWY	ARRRR	WO 94/24561	Oct 27, 1994	WIPO			
JWY	ASSSS	WO 90/09027	Aug 9, 1990	WIPO			
JWY	ATTTT	WO 86/01599	Mar 13, 1986	WIPO			
	AUUUU						

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
JWY	AVVVV	Baldacci, et al., "Discrimination of Wine Using Taste and Smell Sensors", Sensors and Materials, Vol. 10, No. 3, pp. 185-200 (1998)

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Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AWWWWW	Bodenhofer, et al., "Chiral Discrimination By Simple Gas Sensors", <u>Transducers</u> , 1997 International Conference on Solid-State Sensors and Actuators, Digest of Technical Papers, <u>Transducers 97</u> , Chicago, IL, June 16-19, 1997, vol. 2, pp. 1391-1394 IEEE,
	AXXXXX	Bodenhofer et al., "Performances of Mass-Sensitive Devices for Gas Sensing: Thickness Shear Mode and Surface Acoustic Wave Transducers", <u>Anal. Chem.</u> , Vol. 68, No. 13, pp. 2210-2218 (July 1, 1996)
	AYYYYY	Breheret et al., "On-line differentiation of mushrooms aromas by combined Headspace/multi-odour gas sensors devices", <u>Bioflavour 95</u> , Dijon, France (Les Colloques, no. 75), pp. 103-107, (February 14-17, 1995)
	AZZZZZ	Bruschi et al., "Gas sensing with conducting polymer thin film resistors obtained from commercial photoresist patterns", <u>Proceedings of the First Italian Conference</u> , (1996), pp 69-73
	AAAAAA	Butterworth, et al., "Zeta Potential measurements on Conducting Polymer-Inorganic Oxide Nanocomposite Particles", <u>Journal of Colloid and Interface Science</u> , Vol. 174, pp. 510-517, (1995)
	ABBBBB	Casella, et al., "Copper dispersed into polyaniline films as an amperometric sensor in alkaline solutions of amino acids and polyhydric compounds", <u>Analytica Chimica Acta</u> , Vol 335, pp. 217-225, (1996)
	ACCCCC	Chandiok et al., "Screening for bacterial vaginosis: a novel application of artificial nose technology", <u>J. Clin. Pathol.</u> , Vol. 50, pp. 790-791 (1997)
	ADDDDD	Costello, et al., "Novel composite organic-inorganic semiconductor sensors for the quantitative detection of target organic vapours", <u>J. Mater. Chem.</u> , Vol 6, no. 3, pp. 289-294 (1996)
	AEEEEEE	Dickinson, et al., "Generating Sensor Diversity through Combinatorial Polymer Synthesis", <u>Anal. Chem.</u> Vol. 69, pp. 3413-3418, 1997
	AFFFFFF	Doleman, et al., "Quantitative Study of the Resolving Power of Arrays of Carbon Black-Polymer composites in Various Vapor-Sensing Tasks", <u>Anal. Chem.</u> , Vol 70, pp. 4177-4190, 1998
	AGGGGC	Domansky, et al., "Development and Calibration of Field-Effect Transistor-Based Sensor Array for Measurement of Hydrogen and Ammonia Gas Mixtures in Humid Air", <u>Anal. Chem.</u> , Vol. 70, No. 3, pp. 473-481 (February 1, 1998)
	AHHHHH	Forsyth, et al., "Dielectric properties of conductive composites at microwave frequencies", <u>New Horizons for Materials</u> , 2995, pp. 279-285 (1995)
	AIIIII	Jiang, et al., "Preparation and Properties of Organic Polymer Sub-Micrometer Function Films", <u>Electrets</u> , 1996, 9 th International Symposium on Shanghai, China, September 25-30, 1996, NY, pp. 678-683
	AJJJJJ	Laranjeira et al., "A conductimetric system based on polyaniline for determination of ammonia in fertilizers", <u>Analytical Letters</u> , Vol. 30, no. 12, pp. 2189-2209 (1997)
	AKKKKK	Lefebvre, et al., "Chemical Synthesis, Characterization, and Electrochemical Studies of Poly(3,4-ethylenedioxythiophene)/Poly(styrene-4-sulfonate) Composites", <u>Chem. Mater.</u> , Vol. 11, No. 2, pp. 262-268 (1999)
	ALLLLL	Lipman, "E-noses nose out traditional odor-detection equipment", <u>EDN</u> , pp. 59-66, December 17, 1998
	AMMMMI	Luinge, et al., "Trace-level identity confirmation from infrared spectra by library searching and artificial neural networks", <u>Analytica Chimica Acta</u> , Vol. 345, pp. 173-184, 1997
	ANNNNN	Meister et al., "Polymer-Oxide-Silicon-Field-Effect-Transistor (POSFET) as sensor for gases and vapors", <u>Electrochemical Society Proceedings</u> , Vol 97-9, pp 16-22

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<i>[Signature]</i>	2/3/2005

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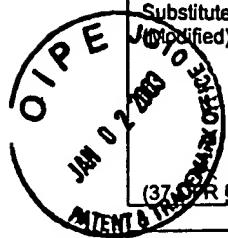
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		Filing Date April 24, 2001	Group Art Unit 1743

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	A00000	Moy et al., "Transient signal modelling for fast odour classification", <u>Bioflavour 95</u> , Dijon, France, (Les Colloques, no. 75), pp. 55-58, (February 14-17, 1995)
	APPPPP	Neaves et al., "A new generation of integrated electronic noses", <u>Sensors and Actuators</u> , B 26-27, pp. 223-231 (1995)
	AQQQQQ	Partch, et al., "Conducting Polymer Composites", American Chemical Society, pp. 368-386 (1992)
	ARRRRR	Paulsson, et al., "Breath alcohol, multi sensor arrays and electronic noses", <u>SPIE</u> , Vol. 2932, pp. 84-90 (3/97)
	ASSSSS	Preti, "Analysis of lung air from patients with bronchogenic carcinoma and controls using gas chromatography-mas spectrometry", <u>Journal of Chromatography</u> , Vol. 432, pp 1-11 (1988)
	ATTTTT	Rajeshwar, et al., "Polypyrrole composites containing platinum or carbon black: from synthesis to novel applications", <u>Polymer Preprints</u> , American Chemical Society, Vol. 35, No. 1, pp. 234-235, March, 1994)
	AUUUUU	Simenhoff, et al. "Biochemical profile of uremic breath", <u>The New England Journal of Medicine</u> , Vol. 297, no. 3, pp. 132-135 (July 21, 1977)
	AVVVVV	Stussi, et al., "Chemoresistive conducting polymer-based odour sensors: influence of thickness changes on their sensing properties", <u>Sensors and Actuators</u> , Vol. B43, pp. 180-185, (1997)
	WWWWWW	Thackeray, et al., "Chemically Responsive Microelectrochemical Devices Based on Platinized Poly (3-methylthiophene): Variation in conductivity with Variation in Hydrogen, Oxygen, or pH in Aqueous solution", February 14-17, 1995, <u>J. Phys. Chem.</u> February 14-17, 1995, Vol. 90, no. 25, pp. 6674-6679 (November 25, 1986)
	AXXXXX	Tourillon, et al., "Dispersive X-Ray Spectroscopy for Time-Resolved In Situ Observatin of Electrochemical Inclusion of Metallic Clusters within a conducting polymer", <u>Physical Review Letters</u> , Vol. 57, No. 5, pp. 603-606 (August 4, 1986)
	AYYYYY	Udrea et al., "Design of a silicon microsensor array device for gas analysis", <u>Microelectronics Journal</u> , Vol. 27, no. 6, pp. 449-457 (1996)
	AZZZZZ	Wampler, "Composites of Polypyrrole and Carbon Black. 2. Electrosynthesis, Characterization, and Influence of Carbon Black Characteristics", <u>Chem. Mater.</u> Vol. 7, No. 3, pp. 585-592 (1995)
	AAAAAA	Veciana-Nogues, et al., "Biogenic Amines as Hygienic Quality Indicators of Tuna, Relationships with Microbial Counts, ATP-Related Compounds, Volatile Amines and Organoleptic Changes", <u>J. Agric. Food Chem.</u> , vol. 45, No. 6, pp. 2036-2041 (1997)
	BBBBBB	Yamoto et al., "A new method for dispersing palladium icroparticles in conducting polymer films and its application to biosensors", <u>Synthetic Metals</u> , Vol. 87, pp. 231-236, (1997)
	CCCCCC	Slater, et al., "Multi-layer Conducting Polymer Gas Sensor Arrays for Olfactory Sensing", <u>Analyst</u> , Vol. 118, pp. 379-384 (April, 1993)
	DDDDDD	Pearce, et al., "Electronic Nose for Monitoring the Flavour of Beers", <u>Analyst</u> , Vol. 118, pp. 371-377 (April, 1993)
	EEEEEE	Lonergan, et al., "Array-Based Vapor Sensing Using chemically Sensitive, Carbon Black-Polymer Resistors", <u>Chem. Mater.</u> , Vol. 8, No. 9, pp. 2298-2312, (November 9, 1996)
	FFFFFF	Freund, et al., "A chemically diverse conducting polymer-based 'electronic nose'", <u>Proc. Natl. Acad. Sci.</u> , Vol. 92, pp. 2652-2656 (March, 1995)
	AGGGGG	Wehrens, et al., "Calibration of an array of voltammetric microelectrodes", <u>Analytica chimica Acta.</u> , No. 334, pp. 93-101, 1996

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J	AHHHHH	Williams, et al., "Resolving combustible gas mixtures using gas sensitive resistors with arrays of electrodes", <u>J. Chem. Soc., Faraday Trans.</u> , Vol. 92, No. 22, pp. 4497-4504, 1996

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P	AA	6,085,576	07/2000	Sunshine et al.			
EB	AB	5,832,411	11/1998	Schatzmann et al.			
BB	AC	4,946,562	08/1990	Guruswamy			
PP	AD	5,948,684	09/1999	Weigl et al.			
BB	AE	5,951,846	09/1999	Lewis et al.			
BB	AF	6,007,775	12/1999	Yager			
BB	AG	6,200,814 B1	03/2001	Malmqvist et al.			
	AH						
	AI						
	AJ						
	AK						

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	AL							
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	AN							
	AO							
	AP							

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